



# **The Impact of a Volatile Economy on Viability Indicators of Investment Projects in the Lagos Real Estate Market**

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## **Abstract**

*In recent times, investors and businesses have been affected by an uncertain and volatile business environment. Real estate investment projects are one of the major sectors impacted by the uncertainty in the economy due largely to its capital-intensive nature. This study, therefore, examines the impact of fluctuations in selected economic variables and their effect on the indicators of viability of real estate investment projects in the Lagos real estate market. Adopting a cross-sectional survey design, the study collected data using a structured questionnaire administered to a sample of 96 estate surveying and valuation firms with expertise on feasibility and viability analysis. Data was analyzed utilizing both descriptive and inferential statistics. Results indicate that interest rate, exchange rate, and inflation were identified as the economic variables that affect viability indicators such as property prices, rental income, construction cost, financing cost, market demand and project profitability/viability. The study recommends among others, a real estate-focused policy intervention by the government to revitalize the sector and achieve faster economic growth. In addition, a follow-up study to investigate the actual viability of the real estate investment projects based on the viability indicators analyzed by the estate surveying and valuation firms should be carried out using respondents drawn from the population of the investors (developers, agents, property owners and financiers).*

**Keywords:** *impact, investment projects, real estate market, viability indicators, volatile economy*

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## **Introduction**

In recent years, Nigeria's economy has been volatile with fluctuations in exchange rates, inflation, interest rates and other economic indicators. The volatile economic climate has impacted various sectors of the economy in different dimensions, and the real estate market is no exception. Thus, the real estate market is prone to these economic fluctuations due to its characteristics and the major role it plays in household expenditure. Studies have examined the relationship between economic indicators and real estate viability (Ezebuilo, Stanley & Ayogu, 2024). However, in terms of investment projects, while many studies have concentrated on the pre-development appraisal of projects in terms of the methods used, there is a need for a more comprehensive analysis of the impact of economic volatility on the broader viability of investment projects, especially in a post-subsidy Nigeria, where economic policy changes in the oil and gas industry which accounts for more than 90% of Nigeria's revenue have resulted in market disruptions with far-reaching effects on the real estate market.

Real estate investment historically has been perceived as a profitable and viable sector, with high potentials for returns both in the increase in capital values or appreciation in the rental income but fluctuations in economic indicators, such as interest rates, GDP, and inflation, can introduce risks that may undermine the viability of real estate investment projects (Case & Shiller, 2023). Despite these uncertainties, the Nigerian real estate investment market has continued to attract interest from both local and international investors due to several factors ranging from increased public expenditure on infrastructure and expanding urbanization, to population growth that has created the need for the development of residential properties, shopping malls, hotels and other complimentary properties despite the negative factors associated with the viability investment projects and their returns (Oyalowo, 2022; Okorji & Brisibe, 2024). The interplay between economic uncertainties and the viability of real estate investment projects in volatile markets is a complex and

critical issue that requires in-depth investigation. By examining the relationship between the causative factors of economic volatility and their effects on real estate investment project viability, this study seeks to provide valuable insights for investors, policymakers, market participants and all stakeholders in the real estate sector.

Studies on the implications of macroeconomic factors and their effects on the profitability and viability of real estate investment projects in Nigeria are scarce and the situation becomes worrisome when viewed from the fact that the removal of petroleum subsidy on May 29, 2023, created an instant volatility which affected other economic indices. The effects of the policy change in the petroleum industry reverberated in every sector of the economy, particularly, the real estate investment market considered by Kohlscheen, Mehrotra and Mihaljek (2018) as one of the most volatile elements of GDP with serious implications for policymakers, financiers and investors.

Therefore, economic indicators create the economic cycle which has a direct relationship with real estate investment viability particularly, the supply and demand of housing within the framework of the boom or bust state of the economy (Pholphirul & Rukumnuaykit, 2009). This study, therefore, examines the impact of a volatile Nigerian economy on the viability indicators of real estate investment projects in the Lagos real estate market by identifying the significant viability indicators affected by the volatile business environment within which real estate investors and developers operate. Furthermore, the study provides significant investigations into possible ways to mitigate the impact of economic volatility on the viability indicators of investment projects in the Lagos property market.

### **Literature Review**

The global economy is dynamic, evolving and uncertain. Changing markets and unforeseen national and global events characterize the business landscape causing unpredictable outcomes. The Nigerian business environment

is not immune to these uncertainties and market disruptions. These notwithstanding, real estate investments continue to receive a large percentage of private investment due to the globalization of the industry with opportunities for real estate investors to diversify their investment portfolio by increasing the viability and profitability of their investments. However, new investment projects in real estate require that proper market research is imperative to adequately understand the impact of changing economic conditions orchestrated by high rates of interest, increasing inflation, and naira devaluation, among other factors and their effects on investment viability. Private investment, being the second element of aggregate demand, is crucial in influencing the pace at which the production of goods and services rises or falls over time (Obayori, Robinson & Omekwe, 2018).

The real estate market, a key aspect of private investment "is the interconnected system of market mechanisms" that creates, transfers, manages, and finances real estate and represents several markets at regional and local levels characterized by different price levels, risks, returns, and dimensions of operation (Geipele & Kauškale, 2013).

The real estate market functions within a given framework of socio-economic, political, legal, and institutional systems that define real estate transactions in the context of demand and supply price mechanisms at any point in time in a geographical setting that comprises different sub-categories, types, and locations. It involves the exchange of assets, whereby rights in real estate are acquired through the medium of exchange between those in need of real estate resources and those that can supply them (Kauškale & Geipele 2017). There are so many factors that affect the functioning of the real estate market at different levels and degrees. Such factors are socio-political, economic, and the global economic environment and the interactions between and among these factors create volatility in the market.

### **The interplay of real estate investment and economic factors**

Real estate investment has been known to play a key role in the economic development of every nation whether developed, undeveloped, developing, or emerging. Real estate constitutes a very significant component of the wealth of every nation, which is estimated at around 70% of the world's wealth (RICS 2014). Hong (2014) has demonstrated that the relationship between real estate and economic development is dynamic and can have varying effects depending on the time horizon measured in terms of short and long terms as well as the economic factors prevalent at any point in time. Hong (2014) revealed that real estate investment in the Chinese economy as a weight in the GDP rose from 3.34% in 2000 to 9.37% in 2011. In an earlier study by Chui and Chau (2005) carried out in Hong Kong, real estate investment contributed to the growth of GDP. Kong, Glascock, and Lu-Andrews (2016) also confirm that the contribution of the real estate market, and by extension, its viability relate directly to the growth of the economy measured in terms of GDP growth or decline.

Despite the limited quantitative data available, the Nigerian real estate sector was valued at N1.06 trillion (\$7 billion) in 2008 with a contribution of about 2% to GDP, an increase to 3.27% in 2009 (EFInA and FinMark Trust, 2010), and valued at \$41.2 billion (N6.4 trillion) in 2014 (Thisday, 2014). According to the NBS (2012), the Nigerian economy grew at a rate of 7.36 in 2011, a slight decline from the rate of 7.98 recorded in 2010. In terms of gross domestic product (GDP) contribution, official records indicate that the real estate sector contributed 7.56%, 7.28%, and 7.73%, respectively, in 2010, 2011, and 2012, NBS (2015). Recent reports from NBS (2024) show that in Q4 2023, the real estate sector contributed 6.06% to the country's GDP indicating a decline from the growth recorded in previous years.

### **Economic Volatility Variables**

Nigeria is not an exception to the critical challenge of economic volatility that

many emerging nations face. Volatility is a word used to describe the regular swings in important economic indicators including GDP growth, inflation rates, exchange rates, and fiscal deficits. Volatility can seriously impede long-term economic growth and sustainable development. Because of its heavy reliance on oil exports, Nigeria's economy is especially vulnerable to changes in the market and outside shocks. In addition to other internal and external causes, this overreliance on a single commodity has led to a state of economic instability that has an impact on all facets of society.

In light of this, it is critical to comprehend the factors that contribute to the volatility of the Nigerian economy. A variety of issues have been the focus of academics and decision-makers, including the dynamics of oil prices, changes in currency rates, political unpredictability, and structural economic imbalances. How these variables interact affects the nation's investment climate, policy-making, and economic resilience.

Fluctuations in oil prices have been recognized as a key contributing factor to a volatile economy in Nigeria because of its heavy reliance on oil exports which determines Nigeria's foreign exchange earnings and government revenue. In periods of falling oil prices, the national budget is deficit and creates unstable outcomes (Sala-i-Martin & Subramanian, 2013). In addition, the exchange rate of the Nigerian currency is highly volatile and directly impacted by fluctuations in oil prices resulting in currency depreciation. This raises inflationary pressures and lowers purchasing power in the economy (Aliyu, 2009). The price of imports, inflation rates, and investor confidence are all impacted by oil price volatility (Oyejide, 2018). To keep the currency stable, the Central Bank of Nigeria (CBN) frequently modifies interest rates and foreign exchange restrictions. However, the results of these interventions can be inconsistent, sometimes resulting in more economic distortions. (Mordi, 2006). In recent times, the rate of inflation in Nigeria has been very high, caused by both demand-pull inflation, which is fuelled by strong consumer demand,

and cost-push inflation, caused by rising import prices and production expenses thereby reducing the purchasing power of consumers and breeds uncertainties in the corporate sector (Adeyeye & Fakiyesi, 1980).

Policy changes by the government in taxation, trade laws, and investment incentives can cause an unstable business environment, impacting negatively long-term economic planning which characterizes the real estate market, affecting investor confidence (Iyoha & Oriakhi, 2002). In addition, economic activity is disrupted by political instability, which includes social unrest and insurgencies in vital industries like agriculture and oil production (Ewetan & Urhie, 2014).

External debt and fiscal deficits in Nigeria have created serious concerns in the economy. The amount of Nigeria's external debt and the cost of debt servicing impact heavily on the country's capacity to maintain fiscal stability. Budgetary restrictions and a decrease in governmental investment in social services and infrastructure might result from high debt payment expenses (Ogundipe et al., 2019). Significant fiscal deficits raise the demand for borrowing and, if supported by monetary expansion, can cause inflationary pressures. These deficits are frequently the result of decreased oil revenue and ineffective state spending (Anyanwu, 1993). In addition, globalization opens the economy to global economic shocks, affecting Nigeria's export revenues, foreign direct investment (FDI) and remittances can be impacted by fluctuations in the global economy, such as recessions, trade disputes, and volatility in the financial markets. The domestic economy may become unstable as a result of these outside shocks (Iyoha, 1999). The price swings of other goods Nigeria exports, such as natural gas and agricultural products, also have an impact on the country. The dynamics of global supply and demand in these markets may have an impact on the stability of the national economy (Adeniyi et al., 2012).

Furthermore, socioeconomic factors such as high rates of unemployment and increasing poverty in Nigeria constrain consumer purchasing and fuel

social unrest, which in turn exacerbates economic volatility thereby affecting the demand and supply of real estate investment projects. A vicious cycle of underdevelopment and instability may result from this (Obadan, 2004). Effective policy execution and resource allocation are hampered by corruption and weak governance frameworks, which exacerbate economic instability and erode investor trust (Ibrahim & Sare, 2018). From the foregoing, Nigeria's economic volatility is caused by a complex interaction of internal and external forces which have been identified in terms of oil price swings, unstable exchange rates, inflation, political unrest, fundamental economic imbalances, external debt, global economic shocks and socioeconomic difficulties. They impact the viability of real estate investment projects in various dimensions.

### **The viability indicators adopted in real estate investment projects**

The most commonly utilized viability indicator used in real estate investment project analysis is the Net Present Value (NPV), with other methods like Internal Rate of Return (IRR) and Payback Period (PP) (Cabanes, de Egana & Romero, 2020). Others may include profitability index (PI), return on investment, compounded cash flow method - the Net Terminal Value (NTV), break-even analysis and many other indicators which may or may not take into account risk analysis depending on the adoption of either two appraisal approaches, the probabilistic and deterministic (single point) estimates within the framework of the traditional and modern methods of real estate investment appraisal (Akinbogun, Binuyo & Akinbogun, 2017; Ogunbiyi, 2023).

Several studies have examined the peculiarity, usage, limitations and reliability of these indicators, proposing the use of more reliable scenario analysis techniques like the risk-adjusted discount rate, risk-adjusted cash flows and Monte Carlo simulation which are rarely adopted in Nigeria to enable a more predictable analysis of investment viability in the era of high interest rates, high levels of inflation, and uncertain economic conditions (Oyetunji,

2016; Oyetunji, Ojo & Ogunleye, 2017; Iroham, et al, 2021)

Ratcliff and Studds (1996) correctly pointed out that most development appraisals place more emphasis on returns than risk analysis. As a result, the methods employed are deterministic in character and are quickly running out of steam in the face of the dynamic socio-economic investment environment of today.

Oyetunji A. K. & Oyetunji-Olakanmi B. G. (2017) studied the practice of investment viability appraisal in the Lagos metropolitan area. A questionnaire survey was administered to estate surveyors and valuers. The study finds that the payback period is the most adopted appraisal technique in practice.

De Lima, Trentin, Oliveira, Batistus and Setti (2015) proposed a systematic analysis of the economic viability of investment projects (SAEVIP) model for the analysis of the economic viability of investment projects in fixed assets in the Brazilian economy. Real estate investment investment projects also constitute fixed assets. De Lima, et al (2015) combined both return and risk indicators in their analysis to enable a comprehensive examination. Key indicators identified include net present value (NPV), NPV annualized (NPVA), index benefit/cost (IBC), return on investment annualized (ROIA), index ROIA/minimum rate of attractiveness (MRA) and return on investment (ROI), internal rate of return (IRR) and Payback period and sensitivity analysis to identify the impact of economic indicators on the viability variables while Shahab, Parker, Waddell and Tsiakopoulos (2023) state that developers of investment projects base their decisions on anticipated market trends and their views on potential viability. Thus, the experiences of project failure and low demand can trigger an undersupply of real estate due to rising construction costs, high interest rates, and decreased liquidity. Jagun (2020) confirms this scenario in Nigeria due to the growing evidence of numerous abandoned real estate development projects even before completion and where the projects are completed, disposal of such projects, letting or occupancy is delayed

leading to the heavy burden of interest payment on borrowed funds and issues with loan repayments.

### **The Relationship between the viability indicators in investment projects and Economic Volatility Variables**

There is a rich literature on the relationship between viability indicators of investment projects and economic volatility variables especially in unstable business climates such as Nigeria. According to Sala-i-Martin and Subramanian (2013), this dependency directly affects the nation's currency rates and fiscal stability, two critical viability metrics for investment projects. The viability of investment projects is significantly impacted by exchange rate fluctuation. The price of imported materials and equipment might fluctuate due to changes in the exchange rate, which can affect the overall costs and returns of a project (Aliyu, 2009). Furthermore, inflation can reduce purchasing power, raise operating expenses, and impact consumer demand, all of which can have an impact on the profitability and feasibility of investments. Inflation is fuelled by shifting currency rates among other things (Adeyeye & Fakiyesi, 1980). The investment landscape is further complicated by political instability and policy uncertainty. An unpredictable climate that might discourage investors and impede the completion of projects is created by frequent changes in government policy, security issues, and other types of political instability. The financing and long-term viability of investment projects may be impacted by this uncertainty, which may result in increased risk premiums (Iyoha & Oriakhi, 2002; Ewetan & Urhie, 2014). Another important factor is structural economic imbalances, which include a high reliance on imports and a lack of diversification. Due to its lack of diversification, the Nigerian economy is susceptible to outside shocks, which may have an impact on the viability of investment projects (Ismaila & Imoughele, 2015). Additionally, the economy's reliance on imported goods exposes it to supply chain and worldwide price volatility, which further reduces the viability of investments

(Adewuyi, 2002). Fiscal deficits and external debt are two other variables affecting the feasibility of investments. Government resources may be constrained by high debt payment costs and significant fiscal deficits, which would limit public investment in social services and infrastructure that assist private sector initiatives (Ogundipe et al., 2019; Anyanwu, 1993). Recessions and changes in commodity prices are examples of global economic shocks that can also have an impact on export revenues and foreign direct investment, which in turn can have an impact on the macroeconomic environment that surrounds investment projects (Iyoha, 1999; Adeniyi et al., 2012).

### **Methodology**

The study adopts a cross-sectional survey research design with the use of a structured questionnaire to obtain data from the respondents who are Estate Surveyors and Valuers in Estate Surveying and Valuation firms with core professional practices in real estate development. This design aligns with Alabi (2019). A cross-sectional survey design is most suitable for studies which obtain data at the same time from the population or sample with the aid of a structured questionnaire. The study is focused on the Lagos real estate market. Lagos State a South-Western Nigerian city was formally the federal capital of Nigeria and is currently regarded as Nigeria's commercial capital. In terms of status, the city is a mega-city having a minimum of at least 10 million inhabitants. As a mega city, it is the engine of socio-economic growth and development with the capacity of attracting foreign investment in several sectors of the economy which directly impacts the real estate investment market. Lagos has the largest concentration of real estate investment with a vast portfolio of real estate investment and as such is regarded as the most active in Nigeria. In terms of infrastructure, Lagos State has outstanding road infrastructure. For example, the 10-lane massive road construction incorporating blue and red rail lines along the Lagos-Badagry Expressway that links Cotonou, the economic capital of the Republic of Benin, the Dangote Petrochemical

refinery, the proposed international airport along the Lekki-Epe axis, the Atlantic City Project, the Lekki Free Trade Zone, and the proposed Fourth Mainland Bridge. These and many other investments in infrastructure by the government and the private sector make the megacity the hub of real estate investment projects and market activities in Nigeria. In terms of its geographical location as a coastal city, the state has several seaports which account for the largest volume of imports and exports, international and local airports, the centre of capital market activities, and has the highest concentration of professionals in the professional services industry. Lagos State leads in real estate investment research. These characteristics justify the geographical coverage of this study. The population of this study comprise estate surveying and valuation firms. Decree 24 of 1975 (now Cap E13, Laws of the Federation of Nigeria, 2004) formally established Estate Surveying and Valuation as a profession, thereby making Estate Surveyors and Valuers the recognized real estate professionals to value real estate investment projects and, by extension, carry out feasibility and viability studies as part of development valuation methodology. According to the directory published on the website of the professional body, the Nigerian Institution of Estate Surveyors and Valuers (NIESV), about 420 registered firms are operating in Lagos State. This directory of the firms constitutes the sample frame of the study. Studies such as Oloke, Odetunmbi, and Akinwumi (2021) had previously used estate surveying and valuation firms in real estate market studies. The majority of these firms do not focus on the practice of real estate development and appraisal. Therefore, using a snowball non-probability sampling, 96 firms were identified as the firms involved in real estate development and appraisal. The sample size of the study is therefore 96 firms to which questionnaires were administered and 71 responded appropriately giving a response rate of about 74%. Data retrieved from the population is then analyzed using descriptive and inferential statistics such as frequencies and mean scores.

## Results/Findings

**Table 1: Firm and professional characteristics**

Variable	Characteristics	Freq.	%
Number of branches of the firm	0-2 Branches	51	71.8
	3-5 Branches	15	21.1
	6-10 Branches	4	5.60
	Above 10 Branches	1	1.4
Working experience	Less than 1 year	9	12.70
	1-5 years	33	46.5
	6 - 10 years	21	29.6
	11 years and above	8	11.3
Professional qualification	Graduate/Probationer	30	42.3
	Associate below 10 years	27	38.0
	Associate above 10 years	6	8.5
	Fellow	8	11.3
Age of the firm in years	0 - 10 years	42	59.2
	11 - 20 years	5	7.0
	21 - 30 year	18	25.4
	31 and above	6	8.5
Size of firm / organization	Small scale (1-50 employees)	58	81.7
	Medium scale (51-200 employees)	12	16.9
	Large scale (above 200 employees)	1	1.4
Scope of firm's services	Valuation	28	39.4
	Property Management	42	59.2
	Property Development	19	26.8
	Agency	36	50.7
	Property tech	2	2.8
	Total	71	100

Source: Field Survey 2024. N = 71.

Table 1 shows the characteristics of respondents' firms and their professional qualifications. Results show that the majority (51) of the firms had only between 0-2 branches (71.8%), 15 had 3-5 branches (21.1%), 4 had 6-10 branches (5.6%), and firms had more than 10 branches (1.4%). The number of branches

of the firm is an indication of market coverage and the firms' operations in the Lagos real estate market. The distribution shows that 46.5% had experience of 1-5 years in the firms, 29.6% had 6-10 years, 12.7% had less than 1 year of experience, while 11.3% had 11 and above years' experience. This information is a direct indication of the experience of the respondents in the real estate market and professional services. Furthermore, 42.3% of the respondents were graduate members of the professional body, 38% were associate members below 10 years, 8.5% were associate members above 10 years, and 11.3% were fellow members. This also shows a relative balance between newly trained professionals between 0-5 years (76%) and professionals with experience above 5 years (24%). In terms of the age of the firms, the result shows that 42 (59.2%) were ten years old and below, 5 (7.0%) were 11 - 20 years, 18 (25.4%), 21 - 30 years, while 6 (8.5%) existed above 31 years. This shows that most of the firms were relatively new firms expected to have new modes of practice, which is vital to this study. However, a significant portion (34%) of the respondents also had experience above 20 years, hence ensuring reliability in the information provided. The size of the organizations in which the respondents worked shows that 81.7% were small-scale organizations, 16.9% were medium-scale organizations and 2.8% were large-scale organizations. Lastly, the most common specializations were in order, from highest to lowest, Property management, Agency, Valuation, Property Development, and Technology. This shows that the majority of the firms were involved in property functions that concern the viability of property investments.

### Analysis of Viability Indicators of Investment Projects

**Table 2: Most crucial viability indicators for success of property investments in Lagos**

	Viability Indicators	SA	A	N	D	SD	Total	Mean	Rank	Remarks
1	Cashflow projections	29	30	11	1	-	71	4.22	2nd	High

	Viability Indicators	SA	A	N	D	SD	Total	Mean	Rank	Remarks
2	Return on investment (ROI)	31	29	10	-	1	71	4.25	1st	High
3	Market demand	29	26	15	-	1	71	4.15	3rd	High
4	Risk assessments	24	32	12	3	-	71	4.08	5th	High
5	Rental income	25	32	12	2	-	71	4.12	4th	High

Source: Field Survey 2024. N = 71. SD = Standard Deviation. Category: .SA-Strongly Agree (5), A- Agree (4) N-Neutral (3), D- Disagree, (2) SD- Strongly Disagree (1)

Table 2 shows the result of the mean score ranking analysis of the viability indicators considered most crucial for property investment viability by the professionals. The results showed that return on investment (ROI) was ranked first, followed by cashflow projections which ranked second, Market demand ranked third while rental income and risk assessments were fourth and fifth respectively. This shows a strong focus on profit from the investment, ensuring it can provide more income than the capital invested. It surprising that risk assessments by having the least rank appears not to be significant in the assessment of viability indicators. This finding addresses the first objective of this study.

### Analysis of the Impact of Economic Volatility on project

**Table 3: Impact of fluctuation in economic factors on property investment**

	Economic factor	VH	H	A	L	VL	Total	Mean	Remarks
1	Interest rates	33	27	10	1	0	71	4.30	High
2	Exchange rates	32	27	12	0	0	71	4.28	High

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	Economic factor	VH	H	A	L	VL	Total	Mean	Remarks
3	Inflation	41	24	6	0	0	71	4.49	High
4	Gdp growth	26	29	11	5	0	71	4.07	High
	Overall							4.29	High

Source: Field Survey 2024. N = 71. Decision Scale: 0.00 - 1.00 (Very Low), 1.01 - 2.00 (Low), 2.01 - 3.00 (Average), 3.01 - 4.00 (High), 4.01 - 5.00 (Very High).

Table 3 represents the impact of fluctuation in economic factors on property investment. The result of the analysis shows that the majority of the respondents believe that fluctuations in the economic factors of Inflation (4.49), Interest rates (4.30), Exchange rates (4.28) had significant impacts on real estate viability while GDP growth (4.07) had the least impact. Overall, the impact of economic volatility on the viability indicators of investment projects in the Lagos property market was 4.29. This result achieves the second objective of this study.

**Table 4: Property factors most affected by economic volatility**

	Property factors	SA	A	N	D	SD	Total	Mean	Rank
1	Property prices	40	24	7	0	0	71	4.46	2nd
2	Rental income	32	31	8	0	0	71	4.34	3rd
3	Construction costs	43	22	6	0	0	71	4.52	1st
4	Financing costs	32	31	6	1	1	71	4.30	5th
5	Market demand	27	28	14	1	1	71	4.11	6th
6	Project profitability/viability	35	24	11	1	0	71	4.31	4th

Source: Field Survey 2024. N = 71. Category: .SA-Strongly Agree (5), A-Agree (4) N-Neutral (3), D-Disagree, (2) SD-Strongly Disagree (1)

Table 4 represents the ranking of the property factors most affected by economic volatility in the Lagos property market. The result of the mean score analysis shows that the most affected property factors due to economic volatility were construction costs (4.52), property prices (4.46), rental income (4.34), project viability (4.31), financing costs (4.30), and finally market demand (4.11). The implication of this finding is that property supply will most likely decrease during strong economic volatility as costs of construction will go up and property prices will be high hence limiting demand by reducing purchasing power and causing high rate of voids in the market. Rental income will also be affected as tenants would find it difficult to pay rent thereby affecting investors' cash flow, and project profitability will also be affected as costs increase. Financing costs will also go up in response to volatility, and market demand will also reduce as properties will be too expensive to afford. The obvious result of the effect of volatility on these viability factors is delayed project completion, abandonment, cost overrun and loss of income.

**Table 5: Primary challenges faced in property investment due to economic volatility**

	Challenges	SA	A	N	D	SD	Total	Mean	Rank
1	Financing difficulties	32	32	6	-	1	71	4.32	2nd
2	Regulatory hurdles	13	44	12	-	2	71	3.92	6th
3	Market instability	31	32	7	1	-	71	4.30	3rd
4	High construction costs	41	23	7	-	-	71	4.47	1st
5	Low demand for completed projects	15	32	19	5	-	71	3.80	7th

	Challenges	SA	A	N	D	SD	Total	Mean	Rank
6	Cost overruns	27	27	15	1	1	71	4.09	5th
7	Delayed project completion/ abandonment	28	31	11	-	1	71	4.19	4th

Source: Field Survey 2024. N = 71 Category:  
 .SA-Strongly Agree (5), A- Agree (4) N-  
 Neutral (3), D-Disagree, (2) SD- Strongly  
 Disagree (1)

Table 5 represents the ranking of the primary challenges faced in property investment due to economic volatility. The result of the mean score analysis shows that the primary challenges faced were high construction costs (4.47), financing difficulties (4.32), market instability (4.30), project delay/abandonment (4.19), cost overruns (4.09), regulatory hurdles (3.92), and low demand for completed project (3.80).

**Table 6: Strategies to mitigate effects of economic volatility on property investments**

	Strategies	SA	A	N	D	SD	Total	Mean	Rank
1	Diversifying investment portfolios	30	34	7	-	-	71	4.32	1st
2	Long-term financial planning	35	23	12	1	-	71	4.29	2nd
3	Adjusting rental prices	23	34	12	1	1	71	4.08	4th
4	Public-Private collaboration	27	27	14	3	-	71	4.09	3rd
5	Seeking government incentives/subsidies	21	35	12	2	1	71	4.02	5th

Source: Field Survey 2024. N = 71. Source: Category: .SA-  
 Strongly Agree (5), A- Agree (4) N-Neutral (3), D-Disagree,  
 (2) SD- Strongly Disagree (1)

Table 6 represents the ranking of the various strategies to mitigate the negative impact of economic volatility on property investments. The result of the mean score analysis shows that the most preferred strategies were diversifying investment portfolios, followed by long-term financial planning ranked second, PPP collaboration ranking third, adjusting rental prices and seeking government incentives and subsidies were ranked fourth and fifth respectively.

### Recommendations for the Lagos Property Market Participants

**Table 7: Recommendations to improve viability of property investments in Lagos**

	Variables	Freq.	%
1	Better government policies and incentives	56	78.9
2	Improved access to financing	52	73.2
3	Streamlined regulatory processes	42	59.2
4	Enhanced market data and analysis	46	64.8
5	Investment in infrastructure development	40	56.3
6	Creation of secondary mortgage market for low interest estate	40	56.3

*Source: Field Survey 2024. N = 71*

Table 7 above represents the suggestions to improve property viability. From the results, 78.9% of respondents believe that better government policies and incentives would improve the viability of property investments. This suggests that the respondents see government support as crucial for growth in the property sector. While 73.2% suggests improving access to financing would help indicating that the current financing options as limited or inaccessible, 64.8% consider enhanced market data and analysis as important. This suggests that a data-driven market would aid investment decisions. The others (59.2%) believe that streamlining regulatory processes is necessary with implication on the complex and obstructive nature of current market

regulations and 56.3% think that investing in infrastructure development is vital. This indicates that infrastructure is critical for property values and accessibility. Finally, another 56.3% of the respondents believe that a secondary mortgage market would improve viability suggesting that the respondents see the need for more flexible or affordable mortgage options and not just the current mortgage option that is almost unaffordable and inaccessible.

### **Conclusion**

The study established that economic volatility, particularly in inflation, interest rates, exchange rate fluctuations, and GDP growth, significantly impacts property investment projects. Construction costs, property prices, rental income, and project profitability were all found to be sensitive to these macro-economic fluctuations. Inflation was identified as having the most severe impact, followed by interest rates and exchange rates. The most critical indicators for evaluating the viability of property investment projects were identified as Return on Investment (ROI), Cash Flow Projections, Market Demand, Rental Income, and Risk Assessments. Among these, ROI and cash flow projections were ranked as the most crucial for determining the success of property investments. The frequency of delays caused by regulatory and economic uncertainties was also significant, highlighting the need for government reforms to create a more conducive environment for investment. Effective strategies to mitigate the effects of economic volatility include diversifying investment portfolios, adopting long-term financial planning, collaborating with Public-Private Partnerships (PPP), and seeking government incentives or subsidies. Portfolio diversification and long-term financial planning were identified as the most effective strategies to shield investments from economic instability.

The findings of this study highlight the complex relationship between economic volatility and investment viability in the Lagos property market. In

line with existing literature, the research demonstrates that real estate investments are highly susceptible to macroeconomic fluctuations, as evidenced in previous studies by Gilberto (2019) and Mankiw (2019). This study adds to the body of knowledge by detailing how these fluctuations manifest in Lagos, a key property market in Nigeria.

The relationship between economic volatility and the viability of investment projects in the Lagos property market is complex and multifaceted. This study reveals that economic fluctuations, particularly in inflation, exchange rates, and interest rates, pose significant risks to property investment in Lagos. Viability indicators such as ROI and cash flow projections are directly influenced by these economic factors, impacting property prices, rental income, and overall project success. Given the high volatility in Nigeria's economic landscape, real estate investors must adopt proactive strategies to mitigate risks. Understanding the macroeconomic environment and adjusting investment approaches accordingly is crucial for long-term profitability in the Lagos property market.

Based on the findings of this research, the study recommends that government intervention and policy reforms should be focused on the real estate market. These may include financial incentives for real estate investors such as tax reliefs and the creation of a secondary mortgage market which would significantly improve access to financing. Investors should also reduce exposure to the risk of volatility by diversifying investments across different property types and geographical areas.

Real estate academics and professionals should collaborate to carry out market-driven research focused on the adoption of innovative and analytical models provided by big data and artificial intelligence in real estate investment project analysis to improve market forecasting and better decision-making. In addition, a follow-up study should be carried out to investigate the actual profitability and viability of the real estate investment projects based on the forecast indicators produced by the estate surveying and valuation

firms with respondents drawn from the population of the investors (developers, agents, property owners and financiers).

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